

[illegible]

## I. Business Methods

### A. Processes (e.g. Turning workflows into products)

#### 1. ASP

a) The software is accessible to users over the Internet. Users will pay a yearly or less subscription fee to access it and to have access to various content modules for an additional premium. Also, simulations can be run on the site through the workflow and access to third party software is available at additional cost.

b) Users will also have the option to save the data they generate locally on their systems or on Interneer's servers.

#### 2. Intranet/Enterprise Software

a) Customers can also choose to have the software installed on their internal software for a one time license fee and yearly maintenance fee. The installations will likely include customization and integration with other software at the customer's location. All data generated from software use will then reside on customer servers.

## II. Technology

### A. Functionality

#### 1. System Administration:

a) Users can create accounts, assign privileges and sharing rights to accounts, organize methods, information, data etc. into folders, track usage of files and workflows, ensure a workflow process is followed for each file or

method and that the appropriate checks are done, and the right approvals are assigned.

b) Administrators are also able to track what types of methods used by what types of users. Create updates to the expert directory, run data mining tests and allow others to run those same tests.

c) Administrators will also be able to publish to the whole user base content and will be able to approve content from others to publish to everyone else. They can assign usage rights to third party software according to users or groups etc. Superuser accounts may also be provided and be allowed more privileges than typical users but less than administrators, such as assign privileges and function within groups (i.e. they function as group administrators but have no control outside the group).

d) Administrators can also generate reports about the work and usage. They also would manage and set overall system parameters like user interfaces, options, settings, including adding system methods, creating the initial expert directory, adding suppliers manually to the database etc.

## 2. Workflow Creation:

a) Users can build their own methods; link them to the software they use (e.g. CAD, FEA etc.), incorporate interactive equations, images, figures, documents.

- b) Users can specify rules to govern the navigation of the methods, the equation variable values, the decisions and steps to take etc. as they build the processes.
- c) Users will be able to see and use an interactive map that will show the overall method steps, the links and relationships between the steps and the step they are on. They would also use the map for navigation as they build the methods.
- d) The users can publish the methods, or steps in a method, to their group members or they can request that their methods be published to everyone and can submit to administrator or necessary user for review.
- e) Users can organize the methods/workflows under different project headers; they can choose to generate reports during the process for reviews.
- f) Project managers can organize the methods and assign them to project users to use and to track progress on methods hence projects. They can also provide access to the different methods to more than just group members, but also suppliers and customers.
- g) Users can drag and drop different methods or steps in methods into each other. Also, they can drag, move and rearrange the different steps in the methods using the map.
- h) Users can setup their methods to loop back on themselves with different parameters so they can run like programming logic.

- i) Methods can be created using voice instructions. Video attachments can also be used.
- j) Users can specify integration with specific unit dimensions for different parameters and tables (e.g. materials, constants etc.) at each step or process.
- k) Steps in a method can be added without linking them so as to generate simply a list of steps with no relationships or links defined. The user can then select each step and specify what parameters to include in it, what to link it to, what files to attach etc. in no specific order. This provides flexibility and ease of use for the method creation process.

### 3. Interactive Methods Capability

- a) Users can run methods to generate result sets. They can iterate many times, save results, print them out, generate formatted reports and share with others their work using email or by online collaboration.
- b) Users can also save their work in the online journal, which is described below.
- c) Based on how the methods are constructed, users can interact seamlessly (e.g. Matlab) with third party software or by directly being directed to the actual software. Also, users would be able to run the third party software using Interneer's platform.

- d) Users can copy any method for future editing. By copying a method, the user essentially creates a new one for them.
- e) The methods are organized to be intuitive and easy to use by placing menu items that allow the user to quickly navigate around the page and to different steps.
- f) Methods can be run on their own and generate results just like programs do. Users can specify variable value ranges when running these simulations. This allows for quick iterations even if users are not available.
- g) Methods can generate voice instructions for those who prefer (e.g. assembly instructions, cooking instructions etc.) with feedback from user accepted also in voice commands.
- h) Methods can also run at a pre-specified speed rate, step by step, and show videos as well.
- i) User can select from predefined parameter lists e.g. units, material properties etc. already integrated into the method.

#### 4. Annotation

- a) While running a method, the user can choose to annotate a specific page, or element of a page (e.g. equation) and save it so that it is referencable by other users or by her in the future.
- b) The annotation could be made accessible to the public, to the group members only or for personal use only.

c) The annotations are searchable by many parameters including date, username, topic etc.

d) The annotations are also editable by group managers, administrators and/or creators depending on the pre-selected settings.

## 5. Journaling

### a) EJournal

#### (1) Snapshots

(a) User can save a snapshot of the page they are working on with all the results from that page being saved. These snapshots can be saved and organized in different project folders.

(b) All values of variables from equations, plots, figures etc. are saved.

(c) User can also then search their eJournal entries by different parameters including date and content to find the specific entry. By clicking on the entry, they are able to see what they had originally saved.

(d) If there have been updates to the page, the user is informed that the page is no longer current with the option to recreate with new page.

(e) EJournal entries can also be emailed and shared.

(2) Session Recording

(a) Users or administrators can specify settings so that everything the user does on the site, including running or creating methods, is saved in a user session.

(b) These sessions are searchable by various parameters including date and content.

(c) They can be emailed and shared with others.

(d) The expiration date can be set and specified.

(e) In addition, a user can actively specify that they want to start recording a specific session and store and organize that session in a project folder in the eJournal. These types of sessions can also be searched and emailed.

(f) Session recording can be used later to track usage, modifications to methods, history of changes and result sets.

(g) Users can save their workflows at any point, at which time the software will save all the values of variables, notes, images etc. worked on until that point in the workflow so that the users can come back to it later to complete.

b) Report Generation



(1) Formatted reports can be generated from the eJournal for various uses.

Reports can be printed and/or saved. The user will be able to select from a previously created set of formats and they are able to create their own custom ones.

#### 6. Search

a) User is able to search and browse by entering keywords, phrases or questions into a search box. The search then generates a list of results which are organized based on the taxonomy organization and displayed to the user in a manner which allows them to browse and navigate to the desired result, rather than have a long list of results on the screen to look at.

b) The user can also quickly change their search criteria by simply expanding under a specific tree branch to expand the search categories there, hence enabling them to browse in the right location after the initial search is conducted.

#### 7. Taxonomy

a) The user is able to use a taxonomy builder tool to organize all the methods and attach files, figures and other data. The parent/child organization is enhanced with keyword entry at each step and descriptions entered which are then used for effective searching of the methods.

b) The taxonomy builder allows the creation of a network of nodes (parents, children, targets), which can be interconnected, looping on itself and with no initial starting point.

c) A custom taxonomy can be built for each customer or subject area. They can be searched separately or simultaneously.

#### 8. Data mining

a) A separate function allows the ability to sift through all the eJournal entries and sessions recorded to determine usage patterns, to generate recommendations on designs, to infer user expertise by reviewing content etc.

b) This functionality would be accessible to administrators to view all users, to group users to analyze group user data and to personal user accounts to analyze their own activities.

#### 9. Sales Tools

a) Create modules that help sales people generate quotes fast, recommend solutions to customers and to provide quick feedback to customers without having to go to engineer.

#### 10. Integration

a) Architecture modularity and XML standardization allow for quick expansion of functionality and for easier integration to third party software. This integration is achieved by creating custom components that interact between the third party software and the Interneer system. The integration

d) This integration can also provide information about the suppliers used, the equations run, and the users involved in the design.

a) A project manager can setup a workflow method, which contains all the critical parameters for a project, and provide the constraints for each one and how they are linked to each other and how they affect the different users.

c) When run, the global parameter workflow will then generate a list of all the users affected

by the change and additional information about lead time etc., which will enable the project manager to make a quick decision without holding a group meeting.

d) Also, this workflow will hold all the key parameters for others to reference throughout the project and when updated, it will notify all the members of the change.

## 12. Historical Data

a) The user has access to historical data from previous projects either entered manually or automatically using the eJournal functionality.

b) The historical data will be integrated into the software so that when a user is specifying values or making decisions, a list of historical choices or values are available to them to use or select as needed.